**BEST AVAILABLE COPY****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE***In re* Patent Application of:

Paul Roger BRISCOE, et al.

Serial 09/641,495

No.:

Confirmation No.:7001

Filed: August 18, 2000

Docket No.:P26903

Group Art Unit:2157

Examine: JACOBS, LaShonda T

**For: GATHERING ENRICHED WEB SERVER ACTIVITY DATA OF CACHED WEB
CONTENT**

United States Patent and Trademark Office
Randolph Building
401 Dulany Street
Alexandria, VA 22314

DECLARATION UNDER 37 C.F.R. § 1.131

Sir:

We, Paul Roger Briscoe, Cameron Donald Ferstat, Matthew Robert Ganis, Stephen Carl Hammer, Gary Bob Kip Hansen, Sean Alan Harp, Michael Shannon Nichols, Herbert Daniel Pearthree, Paul Reed, Brian James Snitzer, do hereby declare:

1. We are co-inventors of the subject matter disclosed and recited in independent claims 1, 17 and 32 of the above-identified application.

2. We completed the invention of claims 1, 17 and 32 (and those claims dependent thereon) in the United States before May 5, 2000, as evidenced below.

CONCEPTION

3. Before May 5, 2000, we conceived of a system for obtaining enriched activity data in a client-server communications network such that the information requested by a

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

-2-

network element is cached at one or more other network elements, along with a computer readable medium containing a computer program for obtaining enriched activity data in a client-server communications network wherein information requested by a network element is cached at one or more other network elements, as disclosed and recited in independent claims 1, 17 and 32 (and those claims dependent thereon), an embodiment of which is evidenced by IBM Invention Disclosure RAL8-2000-0006 (hereinafter referred to as "the Invention Disclosure") attached hereto as Exhibit A, in addition to other related documents. The Invention Disclosure and other related documents attached hereto is a photocopy of and is identical to the originals, except that all pertinent dates have been removed therefrom.

4. All dates removed from the Invention Disclosure and other attached documents attached hereto are before May 5, 2000.

5. As evidenced in the attached documents including the Invention Disclosure, the inventors conceived of and reduced to practice the following inventive features:

A. A system for obtaining enriched activity data in a client-server communications network, wherein the information requested by a network element is cached at one or more other network elements. A server network element including server software and a database for generating and storing a plurality of information files that are accessible to a requesting network element. Further, the system includes information files having text files and key words that are interpreted by the requesting network element to display the information requested. The information file also includes an uncacheable single pixel Graphics Image Format (GIF) request. Wherein upon interpreting the information file, the single pixel GIF request is transmitted from the requesting element over the communications network to the server network element which reads and stores enriched data contained therein.

B. A method for obtaining enriched activity data in a client-server

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Attorney Docket No.: P26903.A01

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communications network wherein information requested by a network element is cached at one or more other network elements. The method includes generating and storing a plurality of information files at a server network element that are accessible to a requesting network element. The information files include text files, key words and a single pixel Graphics Image Format (GIF) request. Further, the method includes interpreting the information files having the text files, key words and single pixel GIF request by the requesting network element to display the information requested. Further still, the method transmits the single pixel GIF request from the requesting element over the communications network to the server network element, and reads and stores the enriched activity data contained in the transmitted single pixel GIF request at the server network element.

C. A computer readable medium containing a computer program for obtaining enriched activity data in a client-server communications network wherein information requested by a network element is cached at one or more other network elements. The computer program product includes program instructions that generate and store a plurality of accessible information files at a server network element. Further, the information files include text files, key words and a single pixel Graphics Image Format (GIF). The program instructions that receive the single pixel GIF request from the requesting element at the time when the requesting element interprets the contents of the information file. The program instructions that read and store the enriched activity data contained in the transmitted single pixel GIF make the request at the server network element.

6. The benefits and features of a system for obtaining enriched activity data in a client-server communications network such that the information requested by a network element is cached at one or more other network elements, along with a computer readable medium containing a computer program for obtaining enriched activity data in a client-server communications network wherein information requested by a network element is cached at one or more other network elements, are shown and described in the invention

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Attorney Docket No.: P26903.A01

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Disclosure and accompanying documents.

DUE DILIGENCE

7. Inventor Nichols communicated with IBM patent counsel in preparing a patent application based on the Invention Disclosure prior to May 5, 2000.

8. A patentability search was requested by IBM patent counsel and conducted by Wiens Search Service, Inc. prior to May 5, 2000.

9. As an example, IBM patent attorney Stephen Tryan communicated with outside patent counsel Mr. John J. Timar of Womble Carlyle Sandridge & Rice to prepare the application, and the IBM Invention Disclosure and documents were forwarded to counsel prior to May 5, 2000. The final draft of the patent application was forward to IBM on July 27, 2000.

11. The final draft of the patent application was filed in unexecuted form in the U.S. Patent and Trademark Office on August 18, 2000. The declaration was executed by the inventors between September 13, 2000 to October 2, 2000. The executed declaration was submitted on October 27, 2000.

12. We declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.


(1) Paul Roger Briscoe

5/5/2005
Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

-5-



(2) Cameron Donald Ferstat

6 May 2005
Date

(3) Matthew Robert Ganis

Date

(4) Stephen Carl Hammer

Date

(5) Gary Bob Kip Hansen

Date

(6) Sean Alan Harp

Date

(7) Michael Shannon Nichols

Date

(8) Herbert Daniel Pearthree

Date

(9) Paul Reed

Date


(10) Brian James Snitzer

Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

-5-

(2) Cameron Donald Ferstat



(3) Matthew Robert Ganis

Date

5/4/205

Date

(4) Stephen Carl Hammer

Date

(5) Gary Bob Kip Hansen

Date

(6) Sean Alan Harp

Date

(7) Michael Shannon Nichols

Date

(8) Herbert Daniel Pearthree

Date

(9) Paul Reed

Date

(10) Brian James Snitzer

Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

-5-

(2) Cameron Donald Ferstat

Date

(3) Matthew Robert Ganis

Date


(4) Stephen Carl Hammer

5/6/2005

Date

(5) Gary Bob Kip Hansen

Date

(6) Sean Alan Harp

Date

(7) Michael Shannon Nichols

Date

(8) Herbert Daniel Pearthree

Date

(9) Paul Reed

Date

(10) Brian James Snitzer

Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

--5--

(2) Cameron Donald Ferstat

Date

(3) Matthew Robert Ganis

Date

(4) Stephen Carl Hammer

Date

(5) Gary Bob Kip Hansen

Date

(6)  Sean Alan Harp

5/4/05

Date

(7) Michael Shannon Nichols

Date

(8) Herbert Daniel Pearthree

Date

(9) Paul Reed

Date

(10) Brian James Snitzer

Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

-5-

(2) Cameron Donald Ferstat

Date

(3) Matthew Robert Ganis

Date

(4) Stephen Carl Hammer

Date

(5) Gary Bob Kip Hansen

Date

(6) Sean Alan Harp

Date

(7) Michael Shannon Nichols

Date

May 5, 2005

(8) Herbert Daniel Pearthree

Date

(9) Paul Reed

Date

(10) Brian James Snitzer

Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

--5--

(2) Cameron Donald Ferstat

Date

(3) Matthew Robert Ganis

Date

(4) Stephen Carl Hammer

Date

(5) Gary Bob Kip Hansen

Date

(6) Sean Alan Harp

Date

(7) Michael Shannon Nichols

Date

Herbert Daniel Pearthree

(8) Herbert Daniel Pearthree

Date

5/04/2005

(9) Paul Reed

Date

(10) Brian James Snitzer

Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

--5--

(2) Cameron Donald Ferstat

Date

(3) Matthew Robert Ganis

Date

(4) Stephen Carl Hammer

Date

(5) Gary Bob Kip Hansen

Date

(6) Sean Alan Harp

Date

(7) Michael Shannon Nichols

Date

(8) Herbert Daniel Pearthree

Date

(9) Paul Read

5/5/05
Date

(10) Brian James Snitzer

Date

Serial No.: 09/641,495
Attorney Docket No.: P26903.A01

-5-

(2) Cameron Donald Ferstat

Date

(3) Matthew Robert Ganis

Date

(4) Stephen Carl Hammer

Date

(5) Gary Bob Kip Hansen

Date

(6) Sean Alan Harp

Date

(7) Michael Shannon Nichols

Date

(8) Herbert Daniel Pearthree

Date

(9) Paul Reed

Date

(10) Brian James Snitzer

Date

5/4/2005

**Disclosure RAL8-2000-0006**

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By Michael Nichols On
Last Modified By wpts1 wpts1 Or:
Archived on:

Required fields are marked with the asterisk (*) and must be filled in to complete the form.

*Title of disclosure (in English)

Gathering Enriched Web Server Activity Data of Cached Web Content

Summary

Status	Final Decision (File)
Final deadline	
Final deadline reason	
Docket family	RAL9-2000-0063
* Processing location	Raleigh - RPS
* Functional area	(Global Services) GLOBAL SERVICES
Attorney/Patent professional	Stephen Tytran/Raleigh/IBM
IDT team	Stephen Tytran/Raleigh/IBM Bob Hyman/Cary/IBM Judy Stackhouse/Greensboro/IBM Glynn Furr Jr/Raleigh/IBM Dawn Garner/Raleigh/IBM Joel Gempier/Raleigh/IBM Howard Koslow/Raleigh/IBM Mike Marsh/Raleigh/IBM Donald Moore/Raleigh/IBM Matthew Wang/Raleigh/IBM Salim Hafim/Raleigh/IBM EDWARD KELLEY/Fishkill/IBM Jerry Haegeler/Raleigh/IBM Tracy Norris/Raleigh/IBM David Snow/Raleigh/IBM Robert W Freitag/Southbury/IBM
Submitted date	
* Owning division	GS
* Line of business	Primary Inventor's Line of Business (LoB)
Incentive program	
Lab	
* Technology code	
Patent value tool (PVT) score	11

Inventors with a Blue Pages entry

Inventors: Michael Nichols/Dallas/IBM, Cameron Ferstat/Armonk/IBM, Paul Reed/Hawthorne/IBM, Kip Hansen/Armonk/IBM, Paul Briscoe/Atlanta/IBM, Matthew Ganis/White Plains/IBM, Stephen Hammer/Atlanta/IBM, Herbie Pearthree/Raleigh/IBM, Brian Snitzer/Southbury/IBM

Inventor Name	Inventor Serial	Div/Dept	Inventor Phone	Manager Name
> Nichols, M.S. (Michael S.)	875043	77/OSSA	N/A	Payne, J.A. (John)
Ferstat, Cameron D.	743755	77/1EA	N/A	Rankin, Kent K.
Reed, Paul	762785	77/1EA	N/A	Rankin, Kent K.
Hansen, Kip (Gary B.)	946774	1E/VHFA	N/A	Costello, Edward P. (Ed)
Briscoe, Paul	1A5745	05/CFFM	N/A	Gibson, R.M. (Roland)
Ganis, Matthew R.	007091	77/490	N/A	Miller, J. A. (Judy)

RAL8-2000-0006 Gathering Enriched Web Server Activity Data of Cached Web Content - continued

Hammer, Stephen C.	868203	05/CFFM	N/A	Gibson, R.M. (Roland)
Pearthree, Herbert D. (Herbie)	1A4853	77/490	N/A	Miler, J. A. (Judy)
Snitzer, Brian J.	913731	77/490	N/A	Miler, J. A. (Judy)

> denotes primary contact

Inventors without a Blue Pages entry

Serial Number: Sean Alan Harp
 Company: (N/A)
 Citizen of: US
 E-Mail: sharp@3MC.com
 Business Address:
 Business Phone:
 Home Address:
 260 Manning Road #50
 Marietta, GA 30064

IDT Selection

Attorney/Patent professional IDT team
 Stephen Tytran/Raleigh/IBM
 Stephen Tytran/Raleigh/IBM
 Bob Hyman/Cary/IBM
 Judy Stackhouse/Greensboro/IBM
 Glynn Furr Jr/Raleigh/IBM
 Dawn Garner/Raleigh/IBM
 Joel Gempner/Raleigh/IBM
 Howard Koslow/Raleigh/IBM
 Mike Marsh/Raleigh/IBM
 Donald Moore/Raleigh/IBM
 Matthew Wang/Raleigh/IBM
 Salim Halim/Raleigh/IBM
 EDWARD KELLEY/Fishkill/IBM
 Jerry Haegele/Raleigh/IBM
 Tracy Norris/Raleigh/IBM
 David Snow/Raleigh/IBM
 Robert W Freitag/Southbury/IBM

Response due to IP&L [REDACTED]

Main Idea

To view the Main Idea of this disclosure, open the "Main Idea" document from the view

*Critical Questions (Questions 1-9 must be answered in English)

*Question 1

On what date was the invention workable? [REDACTED] Please format the date as MM/DD/YYYY (Workable means i.e. when you know that your design will solve the problem)

*Question 2

Is there any planned or actual publication or disclosure of your invention to anyone outside IBM?

☒ Yes
☐ No

If yes, Enter the name of each publication or patent and the date published below.

Common User Group Meeting

RAL8-2000-0006 Gathering Enriched Web Server Activity Data of Cached Web Content - continued

measure and understand the complete user experience.

*Question 2: How central is the invention to the product(s) which might be expected to contain the invention?

Essential

Reason(s) for above Answer: Measurements which do not include the effect of the internet cache engines and browser caching significantly understate the actual user experience with the web site. At the same time, this new technology allows IBM to exploit the internet cache engines and use them to actually deliver web site content to the end user while reducing the number of web servers required. This drives our cost of delivering the content down, giving IBM significant advantage in the market place.

*Question 3: What is the scope of the claim?

Broad

Reason(s) for above Answer: This technology is applicable to all web sites hosted, designed or implemented by IBM, or anyone else.

Portfolio Need

*Question 1: What are the portfolio needs in the area of your invention?

Listed in PPM Needs

Reason(s) for above Answer:

Exploitation & Enforcement

*Question 1: How easily can the use of the invention by a competitor be detected?

With work

Reason(s) for above Answer: Detection would require capturing the html of competitive web pages parsing it, executing the imbedded external calls and analyzing the interaction. IBM Web Detailer could be modified to perform this function.

*Question 2: How easily can the use of the invention be avoided by a competitor?

With much work

Reason(s) for above Answer: Other approaches to gathering this information would require a significant development of the client-side data generation script and the server-side analysis tools.

Business Value

*Question 1: What percentage of the companies producing products in the field of this invention might use this invention?

Broadly cloned

Reason(s) for above Answer: All companies in the field have the same problem of dealing with the cache engine and deriving accurate measurements.

*Question 2: What is the value of this patent to current or anticipated Alliance Activity between IBM and other companies?

High value

Reason(s) for above Answer:

*Question 3: What is the value of this patent to current or anticipated Technology Transfer Activity between IBM and other companies?

High value

Reason(s) for above Answer:

*Question 4: Does it result in prestige to IBM?

Industry wide

Reason(s) for above Answer: This invention positions IBM as an industry leader in web measurements, especially for very high volume web sites.

Evaluation

This team evaluation was entered by Sandra Christopher/Raleigh/Contr/IBM on [REDACTED]
What is the team's evaluation of this disclosure? Search

Date evaluated: [REDACTED]

Evaluation comments

Final Evaluation History	Who made the final evaluation	Final evaluation date
Search	Sandra Christopher/Raleigh/Contr/IBM	[REDACTED]

Search Information

Date sent: [REDACTED] *Target completion date: [REDACTED] Search results received date:

Who was the search sent to (This area is to designate a Local Searcher name or WAIP): Abdi
Dirie/Arlington/IBM@IBMUS

*Search type: ☒ Patentability ☐ Clearance ☐ Validity ☐ State of Art

*Features to be searched: Please see Disclosure/Full Text Search

Search Office Information

Target completion date: [REDACTED] ☐ Search has been delayed Ship/Return date: [REDACTED]

Search conducted by Wiens

Comments

Final Decision

This decision was entered by Sandra Christopher/Raleigh/Contr/IBM on [REDACTED]

Decision: File

Status: N/A

PPM area:

Date of final decision: [REDACTED]

Additional filing information

Planned Filing date:

Filing comments:

Additional decision comments

Final Decision History

Entered by Sandra Christopher
Docket Family: RAL920000063

Post Disclosure Text & Drawings

To add additional information related to this disclosure once it has been submitted, click the action button below and a new document will be opened for you to enter the new information. To view existing post disclosure information, double-click on the item in the list below (if there has been additional information entered), and the document will open for you to view.



Main Idea for Disclosure RAL8-2000-0006

Prepared for and/or by an IBM Attorney - IBM Confidential

Archived On [REDACTED]

Title of disclosure (in English)

Gathering Enriched Web Server Activity Data of Cached Web Content

Main Idea

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

Cache engines are becoming pervasive on the World Wide Web. As a results, the origin Web servers do not serve (or see) the majority of the user requests for the Web site content. Packet sniffers will not see the requests either, as they are satisfied by cache engines elsewhere in the internet. The technique of using a Single Pixel Clear Gif (which is not cacheable) has been used to ensure that some record is recorded by the origin server for advertisements for some years. However, this solution only logs information aboyut the request for the Single Pixel Clear Gif file itself.

Our solution enriches the information recorded in the web logs for the Single Pixel Clear Gif by appending additional information to it as cgi query string parameters. This enables the log record created by the request for the Single Pixel Clear Gif to function as a 'surrogate' for the complete set of log records which would have been created if the page content had not been cached.

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

We append the following cgi query string data to the HREF tag for the Single Pixel Clear Gif at the time the page is published:

&pag=xxxxxxxx	the relative url of the page on which the Gif appears
&num=xx	the number of elements (HREF/SRCs) on the page at the time of publishing
&ref=xxxxxxxxxx	the url of the page which requested the current page (this is done via Java Script)
&usr=xxxxxxxxxx	the persistent cookie id of the user cookie (Java Script)

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

The Single Pixel Clear Gif has been used before, but the data has not been enriched such that it can be used as a surrogate for the complete set of log records.


4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.

Implemented in the Official Sydney 2000 Olympic Games Web Site in [REDACTED]



Michael Nichols



To: Sandra Christopher/Raleigh/Contr/IBM
cc: Laurie Courage/Watson/IBM@IBMUS, Cameron Ferstat/Australia/IBM@IBMAU, Paul
Reed/Hawthorne/IBM@IBMUS, Kip Hansen/Armonk/IBM@IBMUS, Lorrie Bilderback/Armonk/IBM
From: Michael Nichols/Dallas/IBM@IBMUS
Subject: Re: Final Evaluation for Disclosure Number: RAL8-2000-0006 
Importance: Urgent

Sandra,

Is there any way we can make the search a high priority item? We (IBM) have a hard date of June 1 when we need to start deploying this technology for other customers, and even the low estimate of 60 days puts us at risk.

Thanks,

Mike Nichols Ph.D.
Senior Consulting Solutions Manager
SurfAid Analytics
IBM Global Services

Phone: (817) 962-7791 T/L 522
Fax: (817) 962-6672 T/L 522
email mnichols@us.ibm.com

"The secret to success in business is knowing something nobody else knows" - Aristotle Onassis

Sandra Christopher
AM

To: Michael Nichols/Dallas/IBM@IBMUS
cc:
Subject: Final Evaluation for Disclosure Number: RAL8-2000-0006

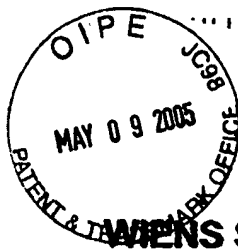
DISCLOSURE NUMBER: RAL8-2000-0006
TITLE: Gathering Enriched Web Server Activity Data of Cached Web Content
ATTORNEY/PATENT PROFESSIONAL: Stephen Tytran/Raleigh/IBM

Thank you again for submitting your invention disclosure identified above. The Intellectual Property Law (IPLaw) department and technical management have evaluated the technical and business merit of the invention described in your invention disclosure identified above, and have recommended that a patentability search be conducted.

A patentability search for similar 'prior art' inventions will be performed by IPLaw. The search can take from sixty to ninety days; and we will advise you of the search results when they are received. If our analysis of the search results suggests that your invention is patentable with claims of sufficient scope and licensing value to be a useful addition to IBM's patent portfolio, then we will proceed to prepare and file a

patent application.

Thank you again for your interest in protecting IBM's intellectual property.



RECEIVED [REDACTED]

WIENS SEARCH SERVICE, INC.

4785 Middle Valley Drive

Billings, MT 59105

(406)256-1884 (voice)

(406)256-1883 (fax)

IBM CONFIDENTIAL

SEARCHER: Tim Wiens

SEARCH TYPE: Patentability Search

SEARCH REQUEST NO. - RA800-0006

**TITLE: Gathering Enriched Web Server Activity data of Cached
Web Content**

SEARCH REPORT FOR: Stephen Tytran, Raleigh

FEATURES SEARCHED FOR:

Method for enriching the information recorded in web logs for web systems which utilize a Single Pixel Gif (which is not cachable). This enables the log record created by the request for the Single Pixel Clear Gif to function as a 'surrogate' for the complete set of log records which would have been created if the page content had not been cached. The invention appears to allow gathering of more information about a server which is not presently possible due to the pervasive use of cache engines on the World Wide Web. ✓

CLASS/SUBCLASS

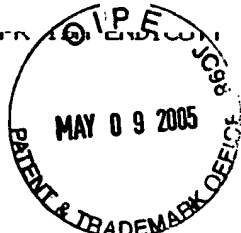
DATABASES

395/200.54,200.63
709/219

DOSS JAPIO WPAT
QPAT INSM TDBS SPI
Altavista ACM DR-Link

RELATED ART:

BACKGROUND ART:



PATENT F. DATE CL/SUB

5892917 9/27/95 395/200.54

PATENT F. DATE CL/SUB

5935207 4/9/97 709/219
6018619 5/24/96 395/200.54
5913041 12/9/96 395/200.63

NON PATENT LITERATURE

NON PATENT LITERATURE

**HOW DOES EACH OF THE RELATED ART REFERENCES
CORRESPOND TO THE SEARCH FEATURE(S)?**

U.S. Patent 5,892,917 discloses a method for monitoring usage of servers on the internet which overcomes log file inaccuracies due to caching (see abstract).

WHAT FEATURE(S) DOES THE BACKGROUND ART PROVIDE:

U.S. Patent 6,018,619 discloses a method for tracking internet usage patterns using a usage log (see abstract).

U.S. Patent 5,913,041 discloses a similar method for monitoring internet and server use using a log file (see abstract).

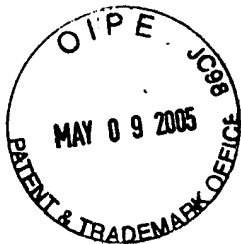
U.S. Patent 5,935,207 discloses a method for collecting information on internet usage and number of hits on a site (see abstract).

FEATURE(S) NOT FOUND:

SIGNATURE: 

DATE: 

DATE RETURNED TO WAIPL:



P.O. Box 12195
Research Triangle Park, NC 27709
Dept. 2Y7/B656
919-543-2430

Mr. John J. Timar
Womble, Carlyle, Sandridge & Rice
One Atlantic Center
1201 West Peachtree Street, Suite 3500
Atlanta, GA 30309-3574

Ref: IBM Docket RAL9-2000-0063US1
(Disclosure: RAL8-2000-0006 "Gathering Enriched Web Server Activity Data of
Cached Web Content")

Dear John:

It is a pleasure to engage you as counsel to IBM for the preparation of the above referenced patent application. Enclosed is the prior art search results for the application. Kindly review them relative to the invention. The application is to be prepared and ready for filing in the US Patent & Trademark Office no later than June 1, 2000. This date is critical as this technology is to be showcased in the Olympics.

Please prepare the application on a 3.5 diskette to send to us. Our office will prepare the formal papers and will handle execution and filing of the application. Additionally, please send us attorney-generated draft copies of the drawings. We will make arrangements to have them prepared as formals. Please have your office prepare the Information Disclosure Statements and PTO 1449 form. The search data information sheets and cited references are enclosed. Please return these with the application.

During prosecution, for purposes of tracking and intra-company transmittals, all papers from the Patent & Trademark Office are to be sent directly to the IBM attorney. Also please note, we will only be using the IBM Docket number, which should be placed on each page of the application (bottom left). Please use the complete IBM Docket Number RAL9-2000-0063US1.

Attached please find copies of all relevant technical information. After you have read the material, please call Michael Nicholas at 817-962-7791 to get help as lead inventors.

Sincerely,

Stephen Tytran

JC:ssc
Enclosures

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